IN THE CLAIMS

This set of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Withdrawn): A pharmaceutical composition for intranasal administration to a mammal comprising: an effective amount of an opioid, a liquid nasal carrier for the opioid; and one or more sweeteners, flavoring agents, or taste masking agents or combinations thereof, wherein the composition is preservative free and has a pH of about 3 to about 6.

Claim 2 (Withdrawn): A pharmaceutical composition according to claim 1, wherein the opioid is morphine, apomorphine, hydromorphone, oxymorphone, dihydromorphine, levorphanol, levallorphan, levophenacylmorphan, norlevorphanol, nalorphine, nalbuphine, buprenorphine, butorphanol, naloxone, naltrexone, nalmexone, oxilorphan, cyclorphan, ketobemidone, fentanyl, sufentanil, alfentanyl, or combinations thereof.

Claim 3 (Withdrawn): The pharmaceutical composition of claim 2, wherein the opioid is hydromorphone or a pharmaceutically acceptable salt thereof.

Claim 4 (Withdrawn): The pharmaceutical composition of claim 2, wherein the opioid is butorphanol or a pharmaceutically acceptable salt thereof.

Claims 5-6 (Cancelled).

Claim 7 (Withdrawn): The pharmaceutical composition of claim 1, wherein the composition contains a buffering agent.

Claim 8 (Withdrawn): A pharmaceutical composition according to claim 1, wherein the composition is a sterile solution or suspension.

Claim 9 (Cancelled).

Claim 10 (Withdrawn): A pharmaceutical composition according to claim 1, wherein the composition has a pH of about 5.0.

Claim 11 (Withdrawn): A method for providing analgesia to a subject in need thereof, the method comprising intranasally administering to the subject, using an intranasal

unit-dose delivery device, a pharmaceutical composition comprising: an effective amount of butorphanol or a pharmaceutically acceptable salt thereof, and a liquid nasal carrier, wherein upon intranasal administration of the composition to a subject in an amount containing about 1.4 mg of butorphanol moiety, the subject exhibits a C_{max} butorphanol plasma concentration of at least about 4000 pg/ml.

Claim 12 (Withdrawn): The method of claim 11, wherein the liquid nasal carrier comprises anhydrous citric acid, purified water and the composition has a pH of about 3 to about 6.

Claim 13 (Withdrawn): The method of claim 12, wherein the composition is a sterile solution or suspension.

Claims 14 - 15. (Cancelled)

Claim 16 (Withdrawn): The method of claim 12, wherein the composition has a pH of about 5.0.

Claim 17 (Withdrawn): An intranasally deliverable pharmaceutical composition comprising: an effective amount of hydromorphone or a pharmaceutically acceptable salt thereof and a liquid nasal carrier having the essential absence of a preservative, wherein upon intranasal administration of the composition to a subject in an amount containing about 1.8 mg of hydromorphone moiety, the subject exhibits a C_{max} hydromorphone plasma concentration of at least about 4000 pg/ml.

Claim 18 (Withdrawn): An intranasally deliverable pharmaceutical composition comprising an effective amount of hydromorphone or a pharmaceutically acceptable salt thereof, and a preservative-free liquid nasal carrier comprising sodium chloride, citric acid, and water.

Claim 19 (Withdrawn): The pharmaceutical composition of claim 18, wherein the composition is a sterile solution or suspension.

Claim 20 (Withdrawn): The pharmaceutical composition of claim 18, wherein the composition has a pH of about 3 to about 6.

Claims 21 – 45 (Cancelled)

Claim 46 (Withdrawn): The pharmaceutical composition of claim 18, wherein the liquid nasal carrier comprises a buffering agent.

Claim 47 (Withdrawn): The pharmaceutical composition of claim 18, wherein the buffering agent is selected from sodium citrate, sodium acetate, sodium phosphate and mixtures thereof.

Claim 48 (Withdrawn): The pharmaceutical composition of claim 47, wherein the composition has a pH of about 3 to about 6.

Claim 49 (Withdrawn): The method of claim 11, wherein upon intranasal administration of the composition from a unit dose delivery device to a subject in an amount of the composition containing about 1.4 mg of butorphanol moiety, the subject exhibits a C_{max} butorphanol plasma concentration of at least about 5000 pg/ml.

Claim 50 (Withdrawn): The method of claim 11, wherein upon intranasal administration of the composition from a unit dose delivery device to a subject in an amount of the composition containing about 1.4 mg of butorphanol moiety, the subject exhibits a T_{max} butorphanol plasma concentration of about 0.083 to about 0.333 hours.

Claim 51 (Withdrawn): The method of claim 11, wherein upon intranasal administration of the composition from a unit dose delivery device to a subject in an amount of the composition containing about 1.4 mg of butorphanol moiety, the subject exhibits an AUC(0-t) butorphanol plasma concentration of about 5351 to about 17722 pg*hr/ml.

Claim 52 (Withdrawn): The method of claim 11, wherein upon intranasal administration of the composition from a unit dose delivery device to a subject in an amount of the composition containing about 1.4 mg of butorphanol moiety, the subject exhibits:

a C_{max} butorphanol plasma concentration of at least about 4000 pg/ml; a T_{max} butorphanol plasma concentration of about 0.083 to about 0.333 hours; and an AUC(0-t) butorphanol plasma concentration of about 5351 to about 17722 pg*hr/ml.

Claim 53 (Currently amended): An intranasal unit-dose delivery device comprising one or more sealed vessels containing a sterilized, preservative-free pharmaceutical composition, said composition comprising an effective amount of ~~butorphanol tartrate~~ an opioid and a liquid nasal carrier, wherein upon positioning the device 1 cm away from a laser beam detection pathway, actuating the device to produce a spray plume perpendicular to said pathway, and detecting droplet size distribution of the spray plume with said laser beam detection pathway, the spray plume has a maximum droplet size of about 2.2 to about 2.4 μm.

Claim 54 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein the butorphanol tartrate is present in a total amount about 0.1 to about 10 mg.

Claim 55 (Previously presented): The intranasal unit-dose delivery device of claim 54 wherein the composition comprises a buffering agent.

Claim 56 (Previously presented): The intranasal unit-dose delivery device of claim 55 wherein the buffering agent is a salt of citrate, acetate or phosphate or combination thereof.

Claim 57 (Previously presented): The intranasal unit-dose delivery device of claim 56 wherein the buffering agent is present in the composition in a total amount of about 0.01% to about 3%, by weight.

Claim 58 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein the liquid nasal carrier comprises an aqueous diluent.

Claim 59 (Previously presented): The intranasal unit-dose delivery device of claim 58 wherein the aqueous diluent is selected from the group consisting of saline, water, dextrose or combinations thereof.

Claim 60 (Previously presented): The intranasal unit-dose delivery device of claim 59 wherein the composition further comprises a sweetening agent.

Claim 61 (Previously presented): The intranasal unit-dose delivery device of claim 60 wherein the sweetening agent is selected from the group consisting of acacia syrup, anethole, anise oil, aromatic elixir, benzaldehyde, benzaldehyde elixir, caraway, caraway oil, cardamom oil, cardamom seed, cardamom spirit, cardamom tincture, cherry juice, cherry syrup, cinnamon, cinnamon oil, cinnamon water, citric acid, citric acid syrup, clove oil, cocoa, cocoa syrup, coriander oil, dextrose, eriodictyon, eriodictyon fluidextract, eriodictyon syrup, aromatic, ethylacetate, ethyl vanillin, fennel oil, ginger, ginger fluidextract, ginger oleoresin, dextrose, glucose, sugar, maltodextrin, glycerin, glycyrrhiza, glycyrrhiza elixir, glycyrrhiza extract, glycyrrhiza extract pure, glycyrrhiza fluidextract, glycyrrhiza syrup, honey, iso-alcoholic elixir, lavender oil, lemon oil, lemon tincture, mannitol, methyl salicylate, nutmeg oil, orange bitter, elixir, orange bitter, oil, orange flower oil, orange flower water, orange oil, orange peel, bitter, orange peel sweet, tincture, orange spirit, compound, orange syrup, peppermint, peppermint oil, peppermint spirit, peppermint water, phenylethyl alcohol, raspberry juice, raspberry syrup, rosemary oil, rose oil, rose water, stronger, saccharin, saccharin calcium, saccharin sodium, sarsaparilla syrup, sarsaparilla compound, sorbitol solution, spearmint, spearmint oil, sucrose, sucralose, syrup, thyme oil, tolu balsam, tolu balsam syrup, vanilla, vanilla tincture, vanillin, wild cherry syrup, or combinations thereof.

Claim 62 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 1 cm away from an impaction plate, actuating the device to produce a spray plume onto said impaction plate, and measuring minimum diameter of the spray pattern, the spray pattern has a minimum diameter of about 2.0 to about 2.2 cm.

Claim 63 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 1 cm away from a detection laser beam, actuating the device to produce a spray plume perpendicular to said laser beam, and detecting droplet size distribution of the spray plume, the spray plume has a Dv10 of about 13.7 to about 19.8 μm.

Claim 64 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 1 cm away from a detection laser beam, actuating the

device to produce a spray plume perpendicular to said laser beam, and detecting droplet size distribution of the spray plume, the spray plume has a Dv50 of about 20.31 to about 55.67 μm.

Claim 65 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 1 cm away from a detection laser beam detection, actuating the device to produce a spray plume perpendicular to said laser beam, and detecting droplet size distribution of the spray plume, the spray plume has a span of about 1.55 to about 1.91.

Claim 66 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 5 cm away from an impaction plate, actuating the device to produce a spray pattern onto said impaction plate, and measuring maximum diameter of the spray pattern, the spray pattern has a maximum diameter of about 7.0 to about 8.4 cm.

Claim 67 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 5 cm away from an impaction plate, actuating the device to produce a spray pattern onto said impaction plate, and measuring maximum diameter of the spray pattern, the spray pattern has a minimum droplet size of about 5.8 to about 8.0 μm.

Claim 68 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 5 cm away from a detection laser beam, actuating the device to produce a spray plume perpendicular to said laser beam, and detecting droplet size distribution of the spray plume, the spray plume has a Dv10 of about 14.38 to about 17.17 μm.

Claim 69 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 5 cm away from a detection laser beam, actuating the device to produce a spray plume perpendicular to said laser beam, and detecting droplet size distribution of the spray plume, the spray plume has a Dv50 of about 31.03 to about 35.32 μm.

Claim 70 (Previously presented): The intranasal unit-dose delivery device of claim 53 wherein upon positioning the device 5 cm away from a detection laser beam, actuating the device to produce a spray plume perpendicular to said laser beam, and detecting droplet size distribution of the spray plume, the spray plume has a span of about 1.5 to about 1.9.

Claim 71 (New): The delivery device of claim 53 wherein the opioid is butorphanol tartrate.

Claim 72 (New): The delivery device of claim 71 wherein nasal carrier is citrate buffered water, and the composition contains sucrose.